

### **REMARKS**

Claims 1-36 remain pending in this application. Claims 1, 3-10, 15 17-27 and 29-36 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Zhuo et al. ("Zhuo") (Pub. No. US 2003/00036865 A1). Claims 2, 16 and 28 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Zhuo in view of Herrbach et al. (U.S. Patent No. 6,269,150). Claims 11-14 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Zhuo in view of Cowgill (U.S. Patent No. 5,835,566). Applicant respectfully requests reconsideration of the rejection and seeks allowance of Claims 1-36 for the reasons set forth below.

### **Zhuo Reference**

Zhuo discloses methods and systems for managing test resources. The methods and systems are used by field engineers located at multiple remote test sites to request a variety of tests for a wide range of large-scale commercial and industrial equipment located at the remote sites. The requests are made to a test coordinator at a central test lab. The test requester accesses a test management web site which displays a web page for collecting test background information and test parameters. The background information and parameters are provided by the test requester and transmitted via a communications link to a test coordinator at the central test lab. The test coordinator then determines the necessary test resources and prepares a cost estimate for the requested test. The test may require various resources, such as test instrumentation, data recording devices, and test personnel support. The test cost estimate and other pertinent information are then sent back to the test requester for review and acceptance. If the test requester accepts the cost estimate, the test requester then submits the actual order for the test at the remote site. The required test equipment is shipped to the specific remote test site and

specialized teams of test personnel travel from the test lab to the specific remote test site to conduct the test under the supervision of the test requester.

### **Present Invention**

The present invention is a computerized method and system for scheduling and running multiple tests on a single system residing in a single test environment so as to allow more tests to be run simultaneously on the telecommunication system, thereby reducing testing time. (App., pp. 2, 4-5) The claimed invention overcomes problems in prior art systems where multiple test persons are required to share equipment resources of a single telecommunication system, coordinating their test sessions such that only one test is being run on the telecommunication system at a particular point in time. (App., p. 4) This causes delays in the overall time to market for new hardware and software features, and delays in the time to troubleshoot and repair hardware and software problems. *Id.* Other prior art efforts to overcome these problems have designed testbeds to include two or more telecommunication systems that reside in separate test environments. *Id.* The problem with the addition of one or more telecommunication systems (each of which resides in its own test environment) is that it significantly increases the overall cost of the testbed. *Id.* Also, the additional telecommunication system(s) occupy valuable space within the testbed. *Id.* The computerized method and system for running multiple tests on a single system residing in a single test environment of this application significantly reduces these cost and space requirements associated with the addition of additional telecommunication system(s). Importantly, as disclosed in the Application, the claimed method and system is operable to perform every disclosed function, from receiving a request to run a selected test on the telecommunication system to actually running the selected test on the telecommunication system without any human intervention. (App., pp.5-6)

**Differences Between Zhuo Reference and Present Invention**

Zhuo does not disclose or suggest the claimed computerized method and system for running multiple tests on a single system residing in a single test environment. Zhuo, by contrast, discloses the testing of multiple pieces (i.e., multiple systems) of large-scale commercial and industrial equipment at multiple remote locations (i.e., multiple test environments – customer sites – located through out the world). (Zhuo, [0002], [0005], [0025]) Test equipment resources are typically shipped to the multiple remote sites for use by specialized teams of test personnel who travel to the remote customer sites from the test lab to conduct the testing. (Zhuo, abstract; [0002], [0003], [0053]) Thus, not only does Zhuo not disclose the requesting, scheduling and running of multiple tests on a single system, it also does not disclose doing so in a single test environment.

Additionally, Zhuo does not disclose the claimed subject matter of a fully computerized system and method for running multiple tests on a single system residing in a single environment. Rather, Zhuo discloses a test resource management process where a test coordinator – a human participant – is required. A test coordinator “at least receives a portion of the test request information.” (Zhuo, [0068]) Zhuo discloses, for example, that a test coordinator “selects an estimate test cost button on the test resource management display page to initiate the cost estimating process. Selecting this button causes one or more display pages containing test background information and test parameters to be presented. In block 1004, the test coordinator reviews the test background information and test parameters. In decision block 1006, the test coordinator determines if any of the test information needs clarification. If so, then in block 1008, the test coordinator contacts the test requester, such as by telephone or email, to obtain the needed clarification . . . .” (Zhuo, [0063]) Further, it is the test coordinator who

receives notification of a conflict and who must take steps to resolve the conflict. (Zhuo, [0072], [0074], [0079]) It is clear that the test coordinator is a required participant.

Zhuo further discloses that the test requester must accept the cost estimate prepared by the test coordinator prior to actually ordering the requested test. (Zhuo, [0060]-[0061]) Also, Zhuo discloses that test personnel travel to the various remote sites to conduct the ordered test under the direction of the test requester (Zhuo, [0003]) where “test personnel costs may include the hourly cost of performing the test and the travel and living expenses for the test personnel.” (Zhuo, [0053])

**A. Rejection of Claims 1, 3-10, 15, 17-27 and 29-36 under § 102**

Claims 1, 3-10, 15, 17-27 and 29-36 were rejected under 35 U.S.C. § 102(e) as being anticipated by Zhuo et al. (Pub. No. US 2003/00036865 A1). Applicant respectfully traverses this rejection for the reasons set forth below.

**1. Independent Claims 1, 15, 25 and 27**

The following tables are provided to compare Applicant’s respective claim elements with the cited reference for that claim element, as discussed in the Office Action. Below each claim element comparison table, Applicant sets forth arguments in response to the Examiner’s rejection.

<b>Claims 1, 15, 25, 27 of Application</b>	<b>Zhuo Citation</b>
A (computerized method for/test system for/computer-readable medium having computer-executable instructions for performing a method of) scheduling multiple tests on a single system residing in a single test environment, comprising: receiving/receive a request to run a selected test on said system at a selected start time	[0056] FIG. 9 is a flow diagram illustrating a process 900 for requesting a test in one embodiment. In one aspect of this embodiment, the process 900 may be used by a test requester, such as a field engineer, located at a remote site where the equipment to be tested is installed. In another aspect of this embodiment, various aspects of the process 900 can be implemented by a server computer in accordance with computer-executable instructions stored on a computer-

	<p>readable medium.</p> <p>[0059] If, instead, the test requester finds the test summary acceptable, then in block 912, the test requester submits the test request. In one embodiment, submitting the test request can include selecting an appropriate submit button that transmits the test details to a server computer for processing of the test request. This processing can include, in one embodiment, storing the various test details in suitable databases and sending an electronic notification, such as an email message, to a selected test coordinator notifying the test coordinator that a test has been requested. As explained above, this electronic message may include a link the test coordinator can select to access test details. In one embodiment, as will be described in greater detail below, the test coordinator can then generate a cost estimate for the test based on the accessed test details and transmit this cost estimate, via the server computer and a suitable communications link, back to the test requester for review and approval.</p>
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As can be seen from the above comparison, Zhuo does not disclose or suggest receiving a request to run a selected test on a single system residing in a single test environment at a selected start time, as required by Claims 1, 15, 25 and 27. Rather, the language from Zhuo cited by the Examiner merely discloses the initiation of a test by a field engineer located at one of a number of remote test sites where the equipment to be tested is installed, whereby the requester transmits an electronic notification, such as an email message, to a selected test coordinator notifying the test coordinator that a test has been requested. The test coordinator then generates a cost estimate for the test and transmits this cost estimate, via the server computer and a suitable communications link, back to the test requester for review and approval. For at least this reason, Claims 1, 15, 25 and 27 are patentable over Zhuo.

Claims 1, 15, 25, 27 of Application	Zhuo Citation
<p>A (computerized method for/test system for/computer-readable medium having computer-executable instructions for performing a method of) scheduling multiple tests on a single system residing in a single test environment, comprising: determining/determine a time slot for said selected test</p>	<p>[0054] FIG. 8 is a diagram illustrating a display page 800 for estimating costs associated with test personnel. The display page 800 includes a labor hours portion 880 and a travel and living expense portion 890. The labor hours portion 880 includes a task description column 882 that describes various tasks test personnel may be engaged in during the course of preparing for and executing a given test. A number of adjacent task duration fields 881 are also provided for arriving at total hours in a total hours column 884. The test coordinator enters appropriate numbers in the task duration fields 881 and total hours and total cost are automatically generated in the total hours column 884 and a total cost column 885, respectively. For example, if test equipment preparation took two persons seven days at 12 hours per day, this would require 168 hours total. Multiplying this hours estimate times an hourly rate, such as \$65 per hour, results in a total cost for test equipment preparation of \$10,920, as shown in the total cost column 885. A total cost estimate for test personnel labor hours is provided in a total labor cost field 886 by summing the costs in the total cost column 885.</p>

With reference to the comparison table above, Zhuo does not disclose or suggest determining a time slot for said selected test for a single system residing in a single test environment, as required by Claims 1, 15, 25 and 27. Rather, the language in Zhuo cited by the Examiner simply discloses estimating costs associated with test personnel's test equipment preparation for testing a piece of equipment at one of a number of remote test sites which includes labor, travel and living expanses, where a test coordinator enters appropriate numbers in the task duration fields 881 for preparation of equipment, removing and packing, set up and checkout, and testing and total hours and total cost are automatically generated in the total hours

column 884 and a total cost column 885, respectively. Specific time slots for the selected test are not determined by the test coordinator or by a computer routing. The test coordinator only prepares a cost estimate for the selected test based, in part, on test personnel labor hours necessary for preparation and execution of the test. For at least this additional reason, Claims 1, 15, 25 and 27 are patentable over Zhuo.

Claims 1, 15, 25, 27 of Application	Zhuo Citation
A (computerized method for/test system for/computer-readable medium having computer-executable instructions for performing a method of) scheduling multiple tests on a single system residing in a single test environment, comprising: identifying/identify any scheduled tests to be run on said system within said time slot	[0074] FIG. 15 is a flow diagram illustrating a routine 1500 for finalizing test preparations in one embodiment. In block 1502, after the routine 1500 receives an order for the test from a user, such as a test requester, the routine permanently reserves the required test resources. In one aspect of this embodiment, the test resources are reserved by blocking out appropriate time periods for performance of the test on usage charts corresponding to the particular resources. In block 1503, the routine 1500 schedules the test. Test schedules for all the required test resources, including personnel, instrumentation, and recording and display devices, can be stored in suitable databases. In decision block 1504, the routine 1500 determines if any schedule conflicts exist for the required test resources. If a conflict exists, then in block 1506, the routine 1500 notifies the test coordinator of the conflict and the routine 1500 completes. If no schedule conflict exists, then in block 1508, the routine 1500 makes the final test preparations. In one embodiment, these final preparations can include generating an equipment list, a materials list, and a shipping list for shipment of the equipment and materials to the test site. After the final preparations have been made, the routine 1500 completes.

As can be seen from the comparison above, Zhuo does not disclose or suggest identifying any scheduled tests to be run on the system within the time slot, where the system is a single

system residing in a single test environment, as required by Claims 1, 15, 25 and 27. Rather, the language from Zhuo cited by the Examiner discloses a routine that determines if any schedule conflicts exist for the required test resources – from any of the multiple remote test sites and equipment for which test resources have been scheduled, not just the requesting remote site and piece of equipment. If a schedule conflict is determined, the routine notifies the test coordinator of the conflict and the routine completes. Specific scheduled tests within specific time slots, however, are not identified by the routine, particularly since there are multiple systems. For at least this additional reason, Claims 1, 15, 25 and 27 are patentable over Zhuo.

Claims 1, 15, 25, 27 of Application	Zhuo Citation
<p>A (computerized method for/test system for/computer-readable medium having computer-executable instructions for performing a method of) scheduling multiple tests on a single system residing in a single test environment, comprising: identifying/identify any conflicts between said selected test and said any scheduled tests</p>	<p>[0063] In block 1002, the test coordinator selects an estimate test cost button on the test resource management display page to initiate the cost estimating process. Selecting this button causes one or more display pages containing test background information and test parameters to be presented. In block 1004, the test coordinator reviews the test background information and test parameters. In decision block 1006, the test coordinator determines if any of the test information needs clarification. If so, then in block 1008, the test coordinator contacts the test requester, such as by telephone or email, to obtain the needed clarification. If no clarification is needed, then in block 1010, the test coordinator determines what test resources are required to perform the test according to the specified parameters. In decision block 1014, the test coordinator determines if the required resources are available. If not, then in decision block 1016, the test coordinator determines if the resource conflict can be resolved. If the resource conflict cannot be resolved, then in block 1020, the test coordinator notifies the test requester of the resource conflict and the process 1000 is complete. If the test resource conflict can be resolved, then in block 1018, the test coordinator resolves the conflict and returns to block 1010 to determine if</p>



	any of the new resource requirements have changed. Resolution of the resource conflict may include changing the test parameters or obtaining the unavailable resources elsewhere.
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As can be seen from the table, Zhuo does not disclose or suggest identifying any conflicts between a selected test on a single system residing in a single test environment and any scheduled tests, via computer as required by Claims 1, 15, 25 and 27. Rather, the language from Zhuo cited by the Examiner discloses a process where a test coordinator (a human participant) determines if required resources are available for a test, if a resource conflict exists with any of the multiple remote test sites, and if so, whether it can be resolved or not. If the resource conflict cannot be resolved, then the test coordinator notifies the test requester of the resource conflict and the process is complete. If the test resource conflict can be resolved, then the test coordinator resolves the conflict and determines if any of the new resource requirements have changed. Resolution of the resource conflict may include changing the test parameters or obtaining the unavailable resources elsewhere. For at least this additional reason, Claims 1, 15, 25 and 27 are patentable over Zhuo.

Claims 1, 15, 25, 27 of Application	Zhuo Citation
A (computerized method for/test system for/computer-readable medium having computer-executable instructions for performing a method of) scheduling multiple tests on a single system residing in a single test environment, comprising:  if none of said scheduled tests are identified or if none of said conflicts are identified, scheduling/schedule said selected test to run on said system at said selected start time	[0067] Returning to decision block 1102, if the test coordinator receives an order for the test, then in block 1104, the test coordinator permanently reserves the test resources and the test date. In decision block 1110, the test coordinator determines if any conflicts exist regarding the test resources or dates. If a conflict exists, then in decision block 1112, the test coordinator attempts to resolve the conflict. If the conflict cannot be resolved, then the test coordinator notifies the test requester accordingly and the process 1100 is complete. The test requester may then elect to modify the test request in order to avoid the conflict. If the conflict can be resolved, however,

	or if no conflict exists, then in block 1114, the test coordinator finalizes test preparations. These preparations can include obtaining equipment lists, material lists, and shipping lists. Other preparations, such as procuring vendor-sourced items and calibrating test equipment, may also be included. After finalizing the test preparations, the process 1100 is complete.
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As can be seen from the above comparison, Zhuo does not disclose or suggest the computerized scheduling a selected test to run on a single system residing in a single test environment at a selected start time, as required by Claims 1, 15, 25 and 27. In contrast, the cited language from Zhuo discloses a process where if a test coordinator receives an order for a test, the test coordinator determines if a conflict exists regarding test resources or dates for multiple remote test sites and pieces and equipment and whether it can be resolved or not. If the conflict cannot be resolved, then the test coordinator notifies the test requester accordingly and the process is complete. If the conflict can be resolved or if no conflict exists, then the test coordinator finalizes test preparations which may include obtaining equipment lists, material lists, and shipping lists. After finalizing the test preparations, the process 1100 is complete. For at least this additional reason, Claims 1, 15, 25 and 27 are patentable over Zhuo.

## **2. Dependent Claims 3-10, 17-24, 26, 29-36**

Dependent Claims 3-10 (which depend directly or indirectly from independent Claim 1), dependent Claims 17-24 (which depend directly or indirectly from independent Claim 15), dependent Claim 26 (which depends directly from independent Claim 25) and dependent Claims 29-36 (which depend directly or indirectly from independent Claim 27), are also distinguishable from Zhuo. As discussed above, Zhuo does not anticipate any of the independent Claims 1, 15, 25 and 27 and, thus, Claims 3-10, 17-24, 26, and 29-36 are also not anticipated by Zhuo.

Additionally, regarding Claims 3, 17 and 29, Zhuo does not disclose or suggest accessing said database to identify a run time for said selected test; and calculating said time slot based on said selected start time and said run time, as required by Claims 3, 17 and 29. Rather, as noted above, paragraphs [0054] and [0063] of Zhuo cited by the Examiner disclose a process where a test coordinator estimates costs associated with equipment preparation performed by test personnel by entering appropriate numbers in the task duration fields 881, whereby total hours and total cost are automatically generated in the total hours column 884 and a total cost column 885, respectively. The paragraphs also disclose a process where a test coordinator determines if required resources are available for a test and, if a resource conflict exists, whether it can be resolved. A specific run time is not identified nor is a time slot calculated. Thus, Claims 3, 17 and 29 are patentable over Zhuo for at least this additional reason.

With respect to Claims 4, 18 and 30, Zhuo does not disclose or suggest partitioning said time slot into one or more time intervals and accessing said database to identify said any scheduled tests for said time intervals, as required by Claims 4, 18 and 30. Rather, as noted above, paragraphs [0054] and [0063] of Zhuo cited by the Examiner disclose a process where a test coordinator estimates costs associated with equipment preparation performed by test personnel by entering appropriate numbers in the task duration fields 881, whereby total hours and total cost are automatically generated in the total hours column 884 and a total cost column 885, respectively. The paragraphs also disclose a process where a test coordinator determines if required resources are available for a test and, if a resource conflict exists, whether it can be resolved. No partitioning of time slots into one or more time intervals occurs. Thus, Claims 4, 18 and 30 are patentable over Zhuo for at least this additional reason.

Further, regarding Claims 5, 19 and 31, Zhuo does not disclose or suggest updating a database such that a selected test corresponds to each of said time intervals, as required by Claims 5, 19 and 31. Rather, paragraph [0066] of Zhuo cited by the Examiner discloses a process where, a test coordinator determines if a test requester is ordering a test or not. If the test requester is not ordering the test, then the test coordinator determines if the test requester wishes to cancel or modify the test. Based on input from the test requester, the test coordinator then either cancels the test or prepares a new test cost estimate based on requester modifications. Thus, Claims 5, 19 and 31 are patentable over Zhuo for at least this additional reason.

Additionally, regarding Claims 6, 20 and 32, Zhuo does not disclose or suggest a computerized method or system for identifying any conflicts between said selected test and any scheduled tests within a single test environment by accessing said database to identify an equipment list for said selected test, accessing said database to identify any equipment conflicts, accessing said database to identify an equipment list for each of said scheduled tests, and comparing said equipment conflicts with said pieces of equipment needed to run said scheduled tests, as required by Claims 6, 20 and 32. Rather, paragraphs [0063]-[0064], [0067], [0072], [0074] and [0079] of Zhuo cited by the Examiner disclose determination of resources for testing of multiple pieces of equipment located in multiple remote test environments. Thus, Claims 6, 20 and 32 are patentable over Zhuo for at least this additional reason.

Additionally, Claims 7, 21 and 33 require a computerized method or system wherein a conflict is identified if one of said equipment conflicts matches one of said pieces of equipment needed to run said scheduled tests within a single test environment. Paragraphs [0063]-[0064], [0067], [0072], [0074] and [0079] of Zhuo cited by the Examiner disclose determination of test resources for testing of multiple pieces of equipment located in multiple remote test

environments. Thus, Claims 7, 21 and 33 are patentable over Zhuo for at least this additional reason.

Further, regarding Claims 8, 22, 26 and 34, Zhuo does not disclose or suggest a computerized method or system for determining an alternative start time for said selected test that avoids said conflicts, if one or more of said conflicts are identified, as required by Claims 8, 22, 26 and 34. Rather, paragraph [0063] and [0074] of Zhuo cited by the Examiner disclose a process where the test coordinator determines if required resources are available. If the test resources are not available, then the test coordinator determines if the resource conflict can be resolved, but there is no indication of how a conflict may be resolved. If the resource conflict cannot be resolved, then the test coordinator notifies the test requester of the resource conflict and the process is complete. If the test resource conflict can be resolved, then the test coordinator resolves the conflict. Thus, the routine determines if any schedule conflict exists and, if so, it notifies the test coordinator. The routine does not attempt to resolve any conflict. If there is no conflict, the test coordinator does. Thus, Claims 8, 22, 26 and 34 are patentable over Zhuo for at least this additional reason.

Additionally, regarding Claims 9, 23, and 35, Zhuo does not disclose or suggest a computerized method or test system for running a selected test on said system at a selected start time, as claimed by Applicant. Rather, paragraph [0074] of Zhuo cited by the Examiner merely discloses the process of scheduling a test and making final preparations which can include generating an equipment list, a materials list, and a shipping list for shipment of the equipment and materials to the test site. After the final preparations have been made, the routine 1500 completes. The system does not run any selected tests at a selected start time, as the testing occurs at a remote test site and is managed by a specialized team of test personnel who travel to

the site, under the supervision of the test requester. Thus, Claims 9, 23, and 35 are patentable over Zhuo for at least this additional reason.

Also, with respect to Claims 10, 24 and 36, paragraph [0079] of Zhuo cited by the Examiner simply does not disclose or suggest verifying that any prior scheduled tests have finished running before running said selected test on said system, as required by Claims 10, 24 and 36. Thus, Claims 10, 24 and 36 are patentable over Zhuo for at least this additional reason.

**B. Rejection of Claims 2, 16 and 28 under § 103**

Claims 2, 16 and 28 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zhuo et al. (Pub. No. US 2003/00036865 A1) in view of Herrbach et al. (U.S. Patent No. 6,269,150). Applicant respectfully traverses this rejection for the additional reasons set forth below.

**1. Dependent Claims 2, 16 and 28**

Claim 2 depends from Claim 1, Claim 16 depends from Claim 15 and Claim 28 depends from Claim 27. Thus dependent Claims 2, 16 and 28 are patentable over Zhuo for at least the reasons stated above with respect to independent Claims 1, 15 and 27. In addition, the Examiner has not shown any motivation, suggestion or teaching to combine Zhuo and Herrbach – which are directed to wholly different situations and environments. Zhuo is directed to managing engineering testing for multiple pieces of large-scale commercial and industrial equipment located at multiple remote locations. In contrast, Herrbach appears to be directed to an automated system and method for testing a single telecommunications system within a single test environment. There is no disclosure in Herrbach to perform the steps claimed in the present application.

**C. Rejection of Claims 11-14 under § 103**

Claims 11-14 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Zhuo et al. (Pub. No. US 2003/00036865 A1) in view of Cowgill (U.S. Patent No. 5,835,566). Applicant respectfully traverses this rejection for the reasons set forth below.

The Examiner has not shown any motivation, suggestion or teaching to combine Zhuo and Cowgill – which are directed to wholly different environments. Zhuo is directed to managing engineering testing for multiple pieces of large-scale commercial and industrial equipment located at multiple remote locations. In contrast, Cowgill appears to be directed to a system and method for providing testing of telecommunications network components where a graphical user interface is provided to allow a user to build a test suite. Cowgill is not directed to a system or method for managing or scheduling limited test resources within a single test environment. Cowgill does not disclose the specific steps recited in the claims and is not cited by the Examiner other than for the proposition of being a single telecommunications system

Furthermore, the claimed steps are not disclosed in the cited sections of Zhuo as described in more detail below.

**1. Independent Claim 11**

<b>Claim 11 of Application</b>	<b>Zhuo Citation</b>
A computerized method for scheduling multiple tests on a single telecommunications system residing in a single test environment, comprising:  maintaining a database identifying a plurality of tests and corresponding run times, said database also identifying a plurality of time intervals and corresponding scheduled tests;	[0074] FIG. 15 is a flow diagram illustrating a routine 1500 for finalizing test preparations in one embodiment. In block 1502, after the routine 1500 receives an order for the test from a user, such as a test requester, the routine permanently reserves the required test resources. In one aspect of this embodiment, the test resources are reserved by blocking out appropriate time periods for performance of the test on usage charts corresponding to the particular resources. In block 1503, the routine 1500 schedules the test. Test schedules for all the required test resources,

	<p>including personnel, instrumentation, and recording and display devices, can be stored in suitable databases. In decision block 1504, the routine 1500 determines if any schedule conflicts exist for the required test resources. If a conflict exists, then in block 1506, the routine 1500 notifies the test coordinator of the conflict and the routine 1500 completes. If no schedule conflict exists, then in block 1508, the routine 1500 makes the final test preparations. In one embodiment, these final preparations can include generating an equipment list, a materials list, and a shipping list for shipment of the equipment and materials to the test site. After the final preparations have been made, the routine 1500 completes.</p> <p>FIG. 3 depicts an Instrumentation Parameters Entry Form including entry spaces for test parameter descriptions.</p>
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As can be seen from the comparison above, Zhuo does not disclose or suggest maintaining a database identifying a plurality of tests and corresponding run times or identifying a plurality of time intervals and corresponding scheduled tests for purposes of scheduling tests on a single system residing in a single test environment, as required by Claim 11. Rather, the above cited reference in Zhuo merely discloses storage in a database of test schedules for all scheduled test resources at multiple remote test sites, but not a database identifying all available test and run times. Thus, Claim 11 is patentable over Zhuo for at least this reason.

Claim 11 of Application	Zhuo Citation
<p>A computerized method for scheduling multiple tests on a single telecommunications system residing in a single test environment, comprising:</p> <p>receiving a request to run a selected test on said telecommunications system at a selected start time</p>	<p>[0056] FIG. 9 is a flow diagram illustrating a process 900 for requesting a test in one embodiment. In one aspect of this embodiment, the process 900 may be used by a test requester, such as a field engineer, located at a remote site where the equipment to be tested is installed. In another aspect of this embodiment, various aspects of the process 900 can be implemented by a server computer in accordance with computer-executable</p>



	<p>instructions stored on a computer-readable medium.</p> <p>[0059] If, instead, the test requester finds the test summary acceptable, then in block 912, the test requester submits the test request. In one embodiment, submitting the test request can include selecting an appropriate submit button that transmits the test details to a server computer for processing of the test request. This processing can include, in one embodiment, storing the various test details in suitable databases and sending an electronic notification, such as an email message, to a selected test coordinator notifying the test coordinator that a test has been requested. As explained above, this electronic message may include a link the test coordinator can select to access test details. In one embodiment, as will be described in greater detail below, the test coordinator can then generate a cost estimate for the test based on the accessed test details and transmit this cost estimate, via the server computer and a suitable communications link, back to the test requester for review and approval.</p>
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As seen from the comparison above, Zhuo does not disclose or suggest receiving a request to run a selected test on a single telecommunications system residing in a single test environment at a selected start time, as required by Claim 11. Rather, the language in Zhuo cited by the Examiner merely discloses the initiation of a test request whereby a requester sends a message to a test coordinator as notification for the test coordinator to generate a cost estimate for approval by the requestor. Thus, Claim 11 is patentable over Zhuo for at least this additional reason.

Claim 11 of Application	Zhuo Citation
<p>A computerized method for scheduling multiple tests on a single telecommunications system residing in a single test environment, comprising:</p> <p>determining a time slot for said selected test by accessing said database to identify</p>	<p>[0054] FIG. 8 is a diagram illustrating a display page 800 for estimating costs associated with test personnel. The display page 800 includes a labor hours portion 880 and a travel and living expense portion 890. The labor hours portion 880 includes a task description column 882 that describes various tasks test personnel may be engaged in during the</p>

a run time for said selected test and calculating said time slot based on said selected start time and said run time	course of preparing for and executing a given test. A number of adjacent task duration fields 881 are also provided for arriving at total hours in a total hours column 884. The test coordinator enters appropriate numbers in the task duration fields 881 and total hours and total cost are automatically generated in the total hours column 884 and a total cost column 885, respectively. For example, if test equipment preparation took two persons seven days at 12 hours per day, this would require 168 hours total. Multiplying this hours estimate times an hourly rate, such as \$65 per hour, results in a total cost for test equipment preparation of \$10,920, as shown in the total cost column 885. A total cost estimate for test personnel labor hours is provided in a total labor cost field 886 by summing the costs in the total cost column 885.
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From review of the table above, Zhuo does not disclose or suggest determining a time slot for said selected test by accessing said database to identify a run time for said selected test and calculating said time slot based on said selected start time and said run time where the selected test is to be run on a single system residing in a single test environment, as required by Claim 11. The Examiner's cited reference in Zhuo merely discloses a test coordinator estimating costs associated with test personnel test equipment preparation (e.g. the estimated labor required for the equipment preparation and execution) for a particular test. The test coordinator does not determine a specific run time or time slot for the selected test, he or she only prepares a cost estimate for the selected test based, in part, on test personnel labor hours. Zhuo also does not disclose a database of run times that can be accessed by either the test coordinator or a computer routine. Thus, Claim 11 is patentable over Zhuo for at least this additional reason.

Claim 11 of Application	Zhuo Citation
A computerized method for scheduling multiple tests on a single telecommunications system residing in a single test environment, comprising:	[0074] FIG. 15 is a flow diagram illustrating a routine 1500 for finalizing test preparations in one embodiment. In block 1502, after the routine 1500 receives an order for the test from a user, such as a

identifying any scheduled tests to be run on said telecommunications system within said time slot by partitioning said time slot into one or more time intervals and accessing said database to identify any scheduled tests for said time intervals	test requester, the routine permanently reserves the required test resources. In one aspect of this embodiment, the test resources are reserved by blocking out appropriate time periods for performance of the test on usage charts corresponding to the particular resources. In block 1503, the routine 1500 schedules the test. Test schedules for all the required test resources, including personnel, instrumentation, and recording and display devices, can be stored in suitable databases. In decision block 1504, the routine 1500 determines if any schedule conflicts exist for the required test resources. If a conflict exists, then in block 1506, the routine 1500 notifies the test coordinator of the conflict and the routine 1500 completes. If no schedule conflict exists, then in block 1508, the routine 1500 makes the final test preparations. In one embodiment, these final preparations can include generating an equipment list, a materials list, and a shipping list for shipment of the equipment and materials to the test site. After the final preparations have been made, the routine 1500 completes.
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As can be seen from the table above, Zhuo does not disclose or suggest identifying any scheduled tests to be run on the single system residing in a single test environment within a time slot by partitioning said time slot into one or more time intervals as required by Claim 11.

Rather, the language from Zhuo cited by the Examiner merely discloses a process where test resources are reserved after receiving an order for a test by blocking out appropriate time periods for performance of the test on usage charts corresponding to the particular resources. If a conflict for a required resource to run a test exists, the test coordinator is notified of the conflict and the process completes. Specific scheduled tests for each different piece of equipment at each of a multiple of remote environments are not identified within a specific time slot, nor are there any partitioned time slots. Thus, Claim 11 is patentable over Zhuo for at least this additional reason.

Claim 11 of Application	Zhuo Citation
A computerized method for scheduling multiple tests on a single telecommunications system residing in a single test environment, comprising:  identifying any conflicts between said selected test and said any scheduled tests	[0063] In block 1002, the test coordinator selects an estimate test cost button on the test resource management display page to initiate the cost estimating process. Selecting this button causes one or more display pages containing test background information and test parameters to be presented. In block 1004, the test coordinator reviews the test background information and test parameters. In decision block 1006, the test coordinator determines if any of the test information needs clarification. If so, then in block 1008, the test coordinator contacts the test requester, such as by telephone or email, to obtain the needed clarification. If no clarification is needed, then in block 1010, the test coordinator determines what test resources are required to perform the test according to the specified parameters. In decision block 1014, the test coordinator determines if the required resources are available. If not, then in decision block 1016, the test coordinator determines if the resource conflict can be resolved. If the resource conflict cannot be resolved, then in block 1020, the test coordinator notifies the test requester of the resource conflict and the process 1000 is complete. If the test resource conflict can be resolved, then in block 1018, the test coordinator resolves the conflict and returns to block 1010 to determine if any of the new resource requirements have changed. Resolution of the resource conflict may include changing the test parameters or obtaining the unavailable resources elsewhere.

As can be seen from the table above, Zhuo does not disclose or suggest identifying any conflicts between a selected test for a single system residing in a single test environment and any scheduled tests, as claimed by Applicant. Rather, the language from Zhuo cited by the Examiner simply discloses a process where a test coordinator (a human participant) determines if required resources are available for a test and whether any resource conflict with the multiple remote test environments can or cannot be resolved, but does not identify specific conflicts between selected

tests and scheduled test. Thus, Claim 11 is patentable over Zhuo for at least this additional reason.

Claim 11 of Application	Zhuo Citation
<p>A computerized method for scheduling multiple tests on a single telecommunications system residing in a single test environment, comprising:</p> <p>if none of said scheduled tests are identified or if none of said conflicts are identified, scheduling said selected test to run on said telecommunications system at said selected start time by updating said database such that said selected test corresponds to each of said time intervals</p>	<p>[0067] Returning to decision block 1102, if the test coordinator receives an order for the test, then in block 1104, the test coordinator permanently reserves the test resources and the test date. In decision block 1110, the test coordinator determines if any conflicts exist regarding the test resources or dates. If a conflict exists, then in decision block 1112, the test coordinator attempts to resolve the conflict. If the conflict cannot be resolved, then the test coordinator notifies the test requester accordingly and the process 1100 is complete. The test requester may then elect to modify the test request in order to avoid the conflict. If the conflict can be resolved, however, or if no conflict exists, then in block 1114, the test coordinator finalizes test preparations. These preparations can include obtaining equipment lists, material lists, and shipping lists. Other preparations, such as procuring vendor-sourced items and calibrating test equipment, may also be included. After finalizing the test preparations, the process 1100 is complete.</p>

With respect to the comparison above, Zhuo does not disclose or suggest scheduling a selected test to run on a single telecommunications system residing in a single test environment at a selected start time, as required by Claim 11. Rather, the language from Zhuo cited by the Examiner merely discloses a process where if a test coordinator receives an order for a test, the test coordinator determines if a conflict exists with multiple remote test environments regarding test resources or dates and whether it can be resolve or not. If the conflict cannot be resolved, then the test coordinator notifies the test requester accordingly and the process is complete. If the conflict can be resolved or if no conflict exists, then the test coordinator finalizes test preparations, which may include obtaining equipment lists, material lists, and shipping lists.

After finalizing the test preparations, the process 1100 is complete. Thus, Claim 11 is patentable over Zhuo for at least this additional reason.

## **2. Dependent Claims 12-14 and 26**

Dependent Claims 12-14 (which depend directly or indirectly from independent Claim 11) and dependent Claim 26 (which depends directly from independent Claim 25) are also distinguishable from Zhuo. As discussed above, Claims 11 and 25 are patentable over Zhuo and thus Claims 12-14 and 26 are also patentable over Zhuo.

Additionally, regarding Claims 12 and 26, Zhuo does not disclose or suggest a computerized method or system, if one or more of said conflicts are identified, for determining an alternative start time for said selected test that avoids said conflicts. Rather, the language in paragraphs [0063] and [0074] of Zhuo cited by the Examiner discloses a process where the test coordinator determines if required resources are available. If the test resources are not available, then the test coordinator determines if the resource conflict can be resolved. If a routine is involved, it will permanently reserve the required test resources, after receiving an order for the test from a user. The routine determines if any schedule conflict exists and, if so, it notifies the test coordinator and completes. If the test resource conflict can be resolved, then the test coordinator – not the computer – resolves the conflict. Thus, Claims 12 and 26 are patentable over Zhuo for at least this additional reason.

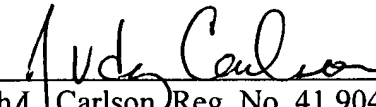

Also, with respect to Claims 13-14, Zhuo does not disclose or suggest a computerized method or system for identifying any conflicts between said selected test and any scheduled tests within a single test environment by accessing said database to identify an equipment list for said selected test, accessing said database to identify any equipment conflicts, accessing said database to identify an equipment list for each of said scheduled tests, and comparing said equipment

conflicts with said pieces of equipment needed to run said scheduled tests, as required by Claims 13 and 14. Rather, paragraphs [0063]-[0064], [0067], [0072], [0074] and [0079] of Zhuo cited by the Examiner disclose determination of resources for testing of multiple pieces of equipment located in multiple remote test environments. Thus, Claims 13-14 are patentable over Zhuo for at least this additional reason.

In view of the foregoing remarks, it is respectfully submitted that the claims are now in condition for allowance and eventual issuance. Such action is respectfully requested. Should the Examiner have any further questions or comments which need be addressed in order to obtain allowance, please contact the undersigned attorney at the number listed below.

Acknowledgement of receipt is respectfully requested.

Respectfully submitted,

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